

## A New species of *Brachystelma* R.Br. (Asclepiadaceae) from Maharashtra, India

P. Tetali, D.K. Kulkarni\*, Sujata Tetali and M.S. Kumbhojkar\*

Naoroji Godrej Centre for Plant Research (NGCPR), Ghat. No.431, Shindewadi,  
Lawkim Ltd. Campus, Khandala Taluka, Satara Dist.  
Maharashtra - 412 801, India

### Abstract

*Brachystelma naorojii* Tctali et al., sp. nov. from Maharashtra is described and illustrated.

### INTRODUCTION

During a survey of rare plants of the Maharashtra State, we came across a tuberous Asclepiadaceae member which was thought to be a species of *Ceropegia*. However, when flowered we realised that the species belonged to the genus *Brachystelma*. A perusal of relevant literature and critical examination revealed that it is a new species. The finding was later confirmed by Dr. D.J. Goyder, Royal Botanic Gardens, Kew, England. The new species is described and illustrated here.

***Brachystelma naorojii* P. Tetali, D.K. Kulk., S. Tctali et Kumbh. sp. nov.** (Fig. 1).

Affinis *B. kolarensis* Arekal et Ramakrishna. Differt plantae plerumque megalotuberum, megafoliorum, flore sine atropurpuris puntatis, atropurpuris loborum coronarum, megapollinitus, floriscentis inita aestate.

Allied to *B. kolarensis* Arekal & Ramakrishna. But differs in larger tubers and leaves, flowers without purple spots, large cupular corona with dark purple corona lobes, bigger pollinia and flowering during summer.

Type: India, Maharashtra, hill slopes of Gavadewadi near Pandav Dhara, 3 km south from Shindewadi Phata on Pune-Satara National Highway (NH-4). July 1993. P. Tetali 72A (Holo - AHMA); *ibid*, P. Tetali 17895, 17896 (Para - K).

\*Division of Plant Sciences, Agharkar Research Institute, Pune, Maharashtra - 411 004, India.

P. Tetali et al.

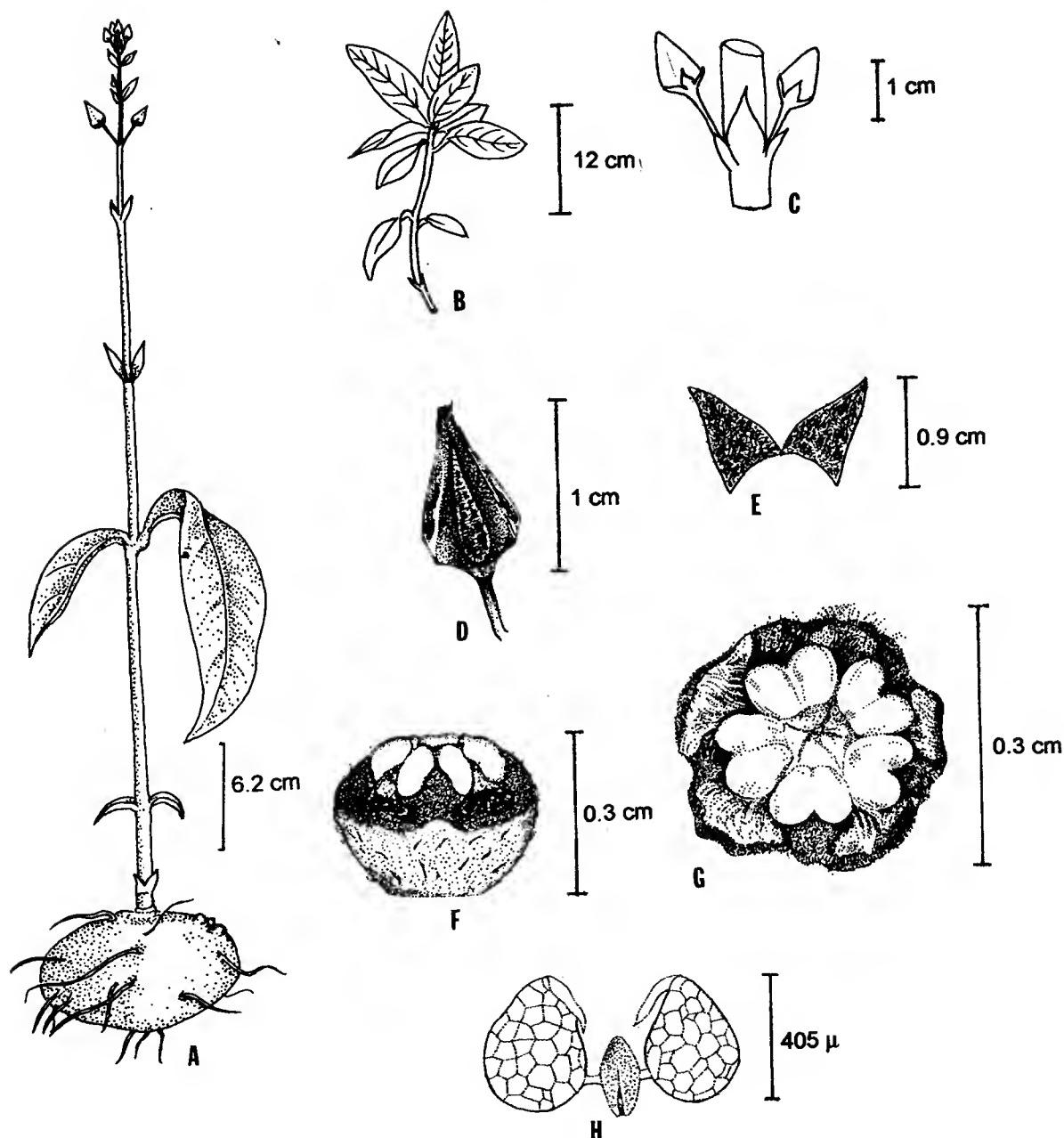


Fig. 1. *Brachystelma naorojii* P. Tetali et al.: A. Plant in flowering state; B. Plant in vegetative state; C. Bracteate flowers; D. Opened flower; E. Corolla - inner view; F. Corona - lateral view; G. Corona - top view; H. Pollinium.

***Brachystelma naorojii sp. nov. (Asclepidaceae)***

A slender erect perennial, herb, 30-55 cm in height. Roots tuberous, round or ovate when young, flattened in mature plants, fleshy, 7-9 x 4-6 cm. Stems glaucous green, occasionally tinged with purple, usually unbranched with deltoid leaf scales, sparingly pubescent, occasionally with appressed hairs. Latex watery, yellowish-green, bitter. Internode between first and second pair of leaves 5-30 cm long, the first pair of leaves always smaller, about 3-6 cm from above the tuber, one of the opposite leaves in the pair is always small. Leaves sessile, opposite-decussate, glabrous above and pale beneath, lamina 1.5-9 x 0.5-4 cm, lanceolate, ovate-oblong or ovate-lanceolate, apex acuminate, margin ciliate, hairs swollen at base. Flowering nodes with opposite, 2-3 mm long scale leaves. Flowers bracteate, two, on either side of the scale leaf, green turning to brick red, reddish-violet and finally to reddish-purple, darker and puberulus within, hairs white. Pedicels 5-7 mm long, sparsely hairy. Calyx 5-partite, lobes 5, 1.5-2 mm long. Corolla deeply 5-fid, lobes 0.9-1 cm long, thickly hairy on the inner side. Corona cupular, 5-lobed, lobes with long white hairs, margin dark purple, lower portion of the corona white, 2.3-3 x 3 mm, sparsely hairy, obtusely five angled, coronal lobes produced into 5 inner lobes incumbent and adpressed on the stamen. Stamens 5, pollinia globose, yellow 405  $\mu$ m long, style-apex pentagonal. Follicles single or in pairs, 6 cm long, tapering at the apex. Seeds comose, dark brown with light brown margin, 0.8-1 cm long, coma silky white, upto 2 cm long.

**Habitat:** Rare, on partially degraded hill slopes and open hill tops among grasses. The hill slopes are used for cattle grazing. The entire area has been declared as D-category Industrial zone by Maharashtra State in order to promote industrial growth.

**Flowering and Fruiting:** May - June.

**Etymology:** The new species has been named after late Mr. Naoroji Godrej, a noted industrialist to commemorate his keen interest in plant conservation.

**Acknowledgements**

The authors wish to thank Dr. D.J. Goyder, Royal Botanic Gardens, Kew for determining the novelty of the species, Dr. A.P. Jagtap for suggestions and to Mr. V.M. Krishna, Mr. D.G. Oak and Mr. P. Gavade for encouragements and necessary help. Thanks are also due to Dr. A.D. Agate, Director, Agharkar Research Institute, Pune for providing facilities, Dr. (Mrs.) Alka Pande for the Latin diagnosis and Mr. D.N. Nagpure for sketches.